

ABSTRACT

A method for adaptive-rate communication includes setting a first target signal margin with respect to an actual noise level and a second target signal margin with respect to a predetermined noise level. The actual noise level is measured at a receiver on a communication channel between a transmitter and the receiver. A transmission rate is selected at which to transmit a signal on the channel such that for the selected transmission rate, a first signal-to-noise ratio (SNR) of the signal relative to the measured actual noise level is greater than a baseline SNR level by at least the first target signal margin, and a second SNR of the signal relative to the predetermined noise level is greater than the baseline SNR by at least the second target signal margin.